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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/868,239	08/07/2001	Thomas Ackermann	P01,0184	7077

7590

06/18/2003

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EXAMINER

HOFF, MARC S

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 06/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Applicati n No.	Applicant(s)	
	09/868,239	ACKERMANN ET AL.	
	Examiner	Art Unit	
	Trang H. Cao	2857	

-- The MAILING DATE of this c mmunication appears on the c ver sheet with the c rrespondence address --

Peri d f r Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disp sition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of a minor informality, "lowest percentage" should read --a lowest percentage--.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 4-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada et al. ("Software Reliability Growth Modeling: Models and Applications").

Regarding claims 1 and 8, Yamada et al. discloses a method and arrangement for predicting measurement data until a final time-point using given measurement data including: matching, using a processor, a stochastic process to said given measurement data (figs. 3 and 5); running simulation runs of said stochastic process from a given time-point until said final time-point (figs. 1&2); determining forecast measurement data for each simulation run (fig. 4); and predicting measurement data within limits of said range, and providing said predicted measurement data as useable output (fig. 4).

Regarding claims 6, 7, and 9, Yamada et al. discloses a method and arrangement for predicting measurement data using given measurement data including:

- (a) Matching, using a processor, a stochastic process to said given measurement data (figs. 3 and 5);

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(b) Yamada et al. discloses the step of determining asymptotic confidence bounds based on three equations (27)-(29) (page 1434). It is considered inherent that a range of the asymptotic confidence bounds is determined by symmetrically sorting probability values generated around an expected value by said stochastic process according to size.

(c) Predicting measurement data within limits of said range, and providing said predicted measurement data as useable output (fig. 4).

Regarding claim 4, Yamada et al. discloses the stochastic process is a non-homogeneous Poisson process (page 1431, col. 2, lines 4-8).

Regarding claim 5, Yamada et al. discloses the measurement data represents number of errors (figs. 3, 4, and 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. ("Software Reliability Growth Modeling: Models and Applications") in view of Wacławski (US-2001/0013008).

Regarding claims 2 and 3, Yamada et al. discloses a method as recited in claim 1 above and further comprising the step of determining a confidence range for the prediction of measurement data (fig. 3). However, Yamada et al. fails to teach

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eliminating a lowest percentage and a highest percentage forecast measurement data, wherein the lowest and highest percentages are equal values.

Waclawski discloses a method forecast mainframe central processing unit (CPU) consumption with ninety-five percent accuracy (95% confidence range) using historical performance data (abstract). The method also provides an upper ninety-five percent confidence level (abstract) and a lower ninety-five percent confidence level (abstract). It is considered inherent that Waclawski's method for forecasting data will ignore both 5% highest in upper confidence level and 5% lowest in lower confidence level to get the ninety-five percent accuracy for predicted data.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply Waclawski's techniques to the invention of Yamada et al. as specified above, because the step of eliminating two equal percentages of the highest and lowest forecast would have made the predicted measurement data more accurate.

RESPONSE TO AMENDMENTS

Applicant's arguments filed May 26, 2003 have been fully considered but they are not persuasive.

4. Applicants argue that the prior art, Yamada, does not disclose performing several simulation runs of a stochastic process.

Examiner respectfully disagrees with Applicants about this issue for the following reason:

It appears that Yamaha discloses performing several simulation runs of a stochastic process in figs. 1 and 2, page 1435.

Conclusion

1. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trang H. Cao whose telephone number is (703) 305 4469. The examiner can normally be reached on M-F (8:00am to 4:30pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703) 308 1677. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308 7382 for regular communications and (703) 308 7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306 3431.

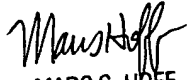
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TC

June 12, 2003


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800